

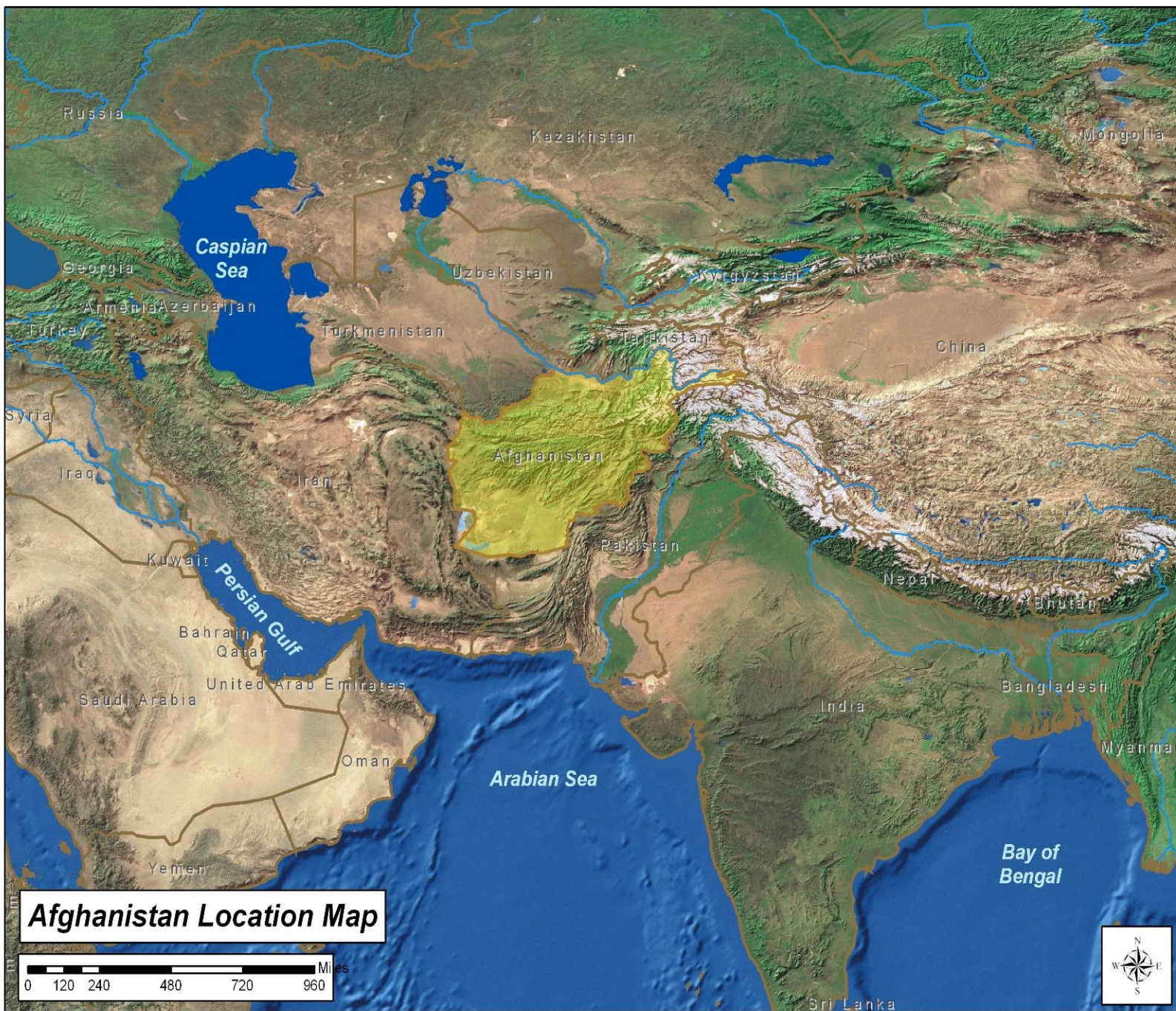
# AFGHANISTAN

- Civil war / damaged infrastructure
- Deteriorated public health





# Where in the world is Afghanistan?





# Physical Environment

- **Topography**

- If operating above 6,000ft implement high altitude countermeasures

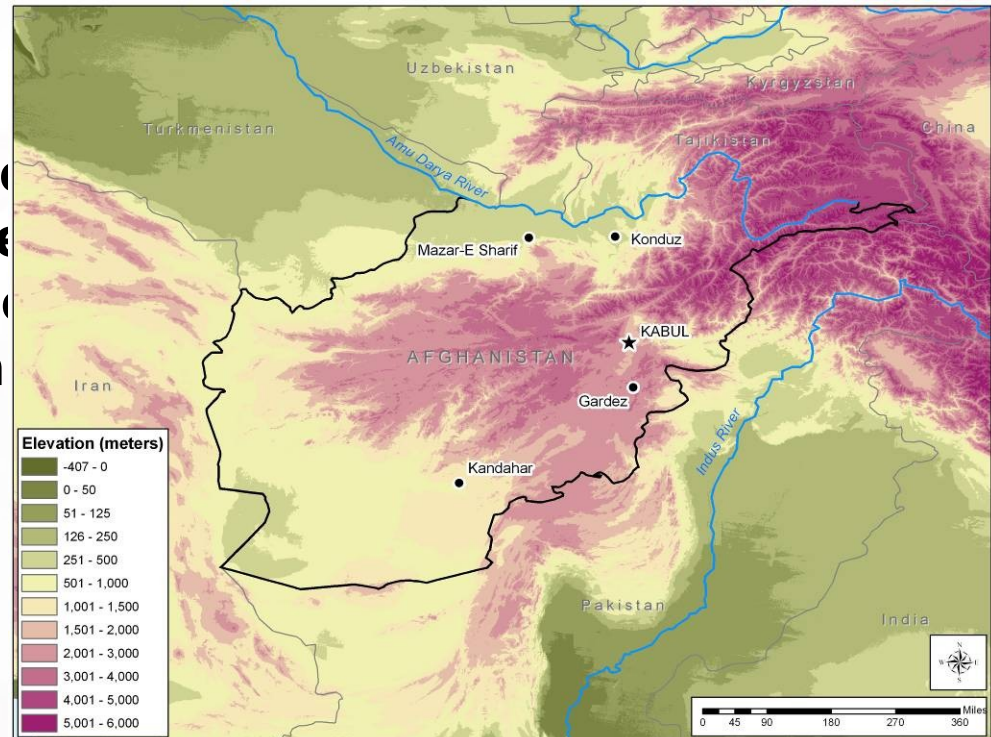
- **Climate**

**Arid to semiarid; cold winters and hot summers**

**Terrain: mostly rugged mountains; plains in north and southwest**

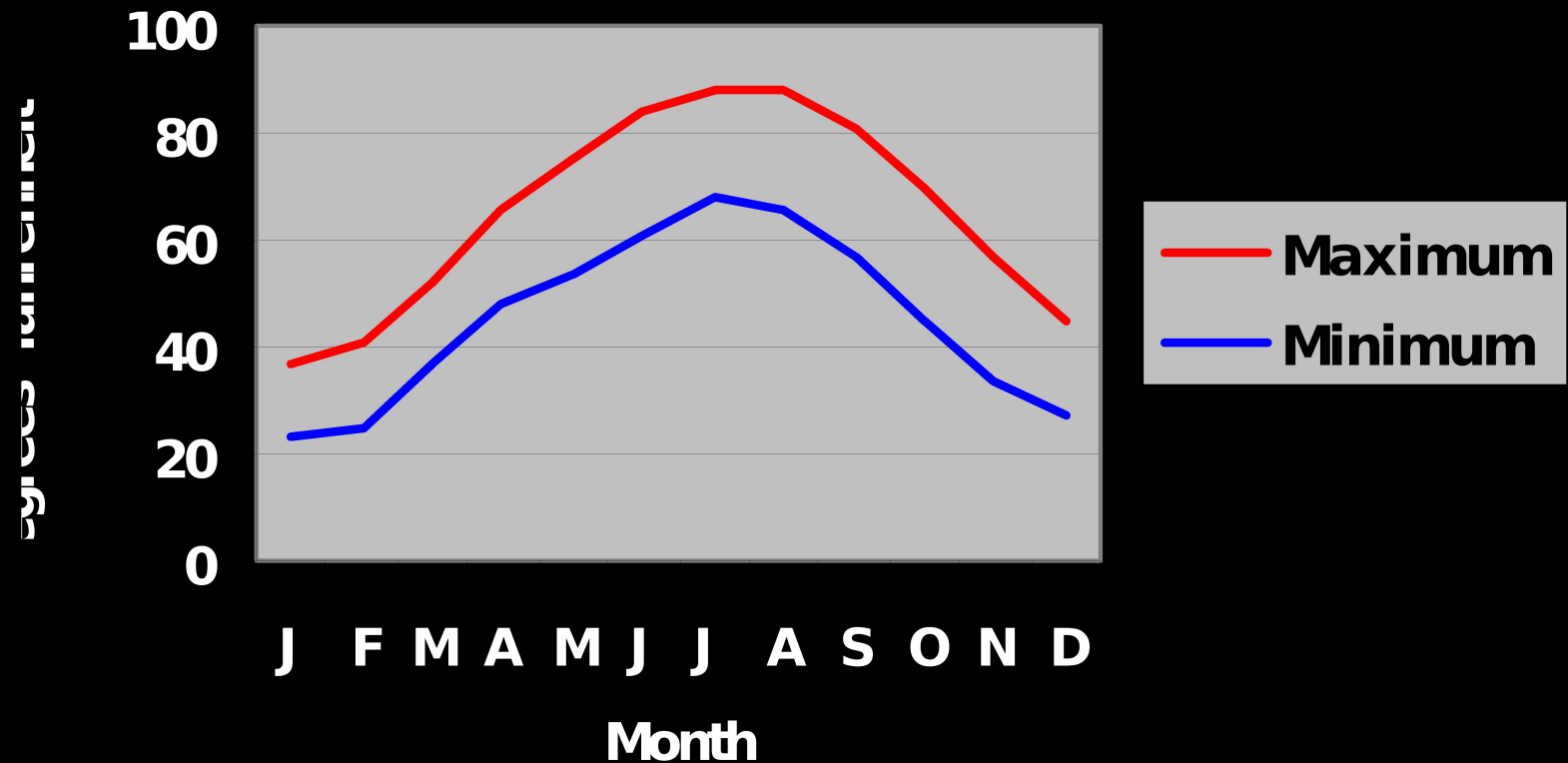
**lowest point: Amu Darya 258 m = approx 846 ft**

**highest point: Nowshak 7,485 m = approx 24,557ft**



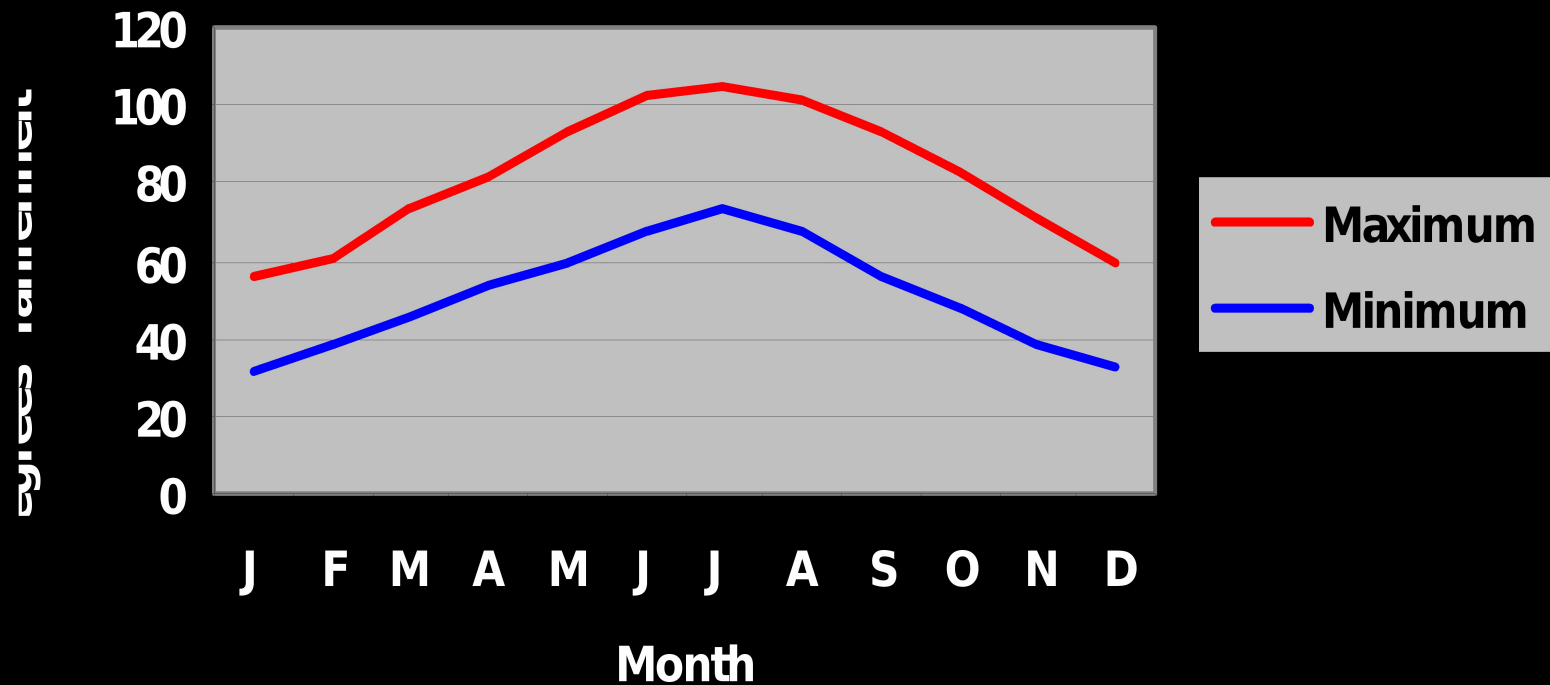
# Physical Environment

**Average Max/Min Temperature in Kabul**



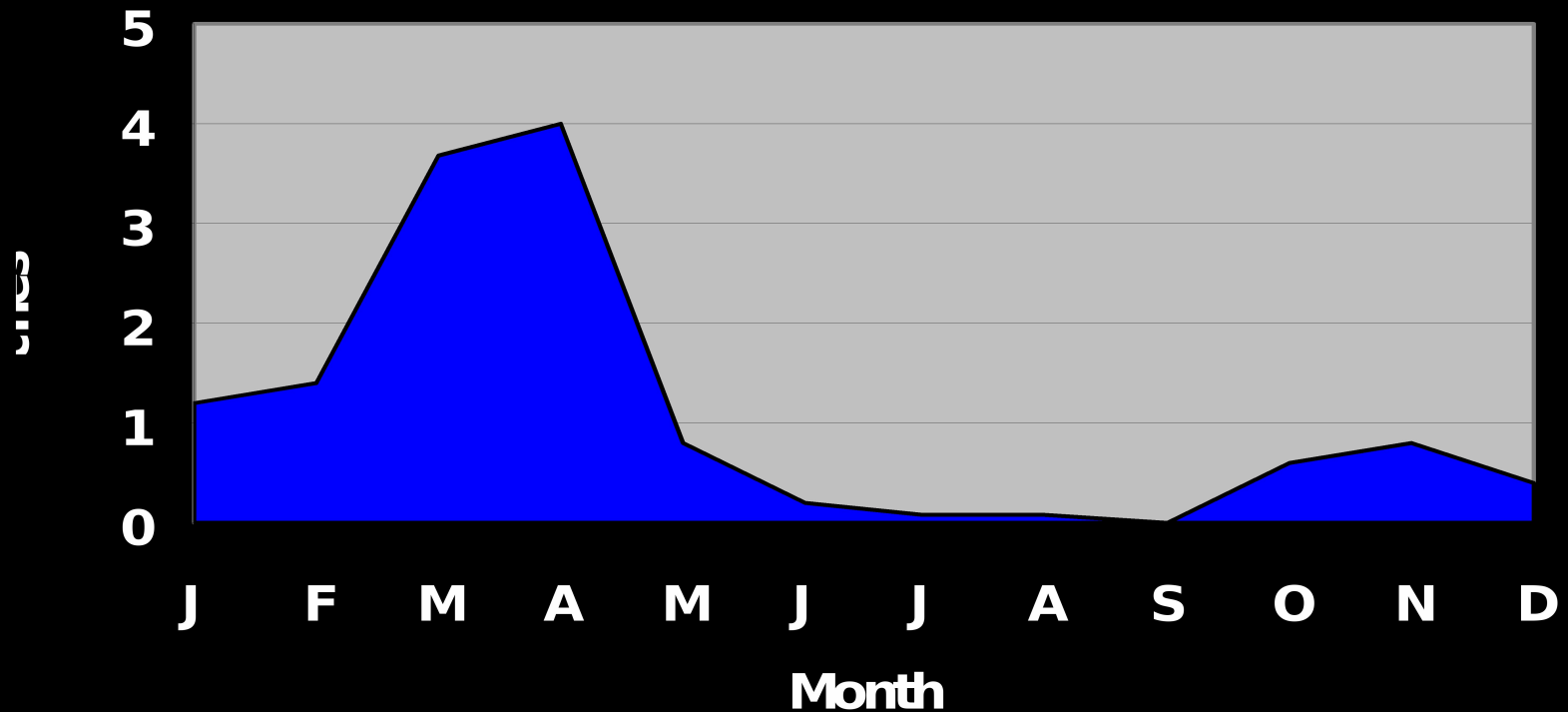
# Physical Environment

Average Max/Min Temperature in Kandahar



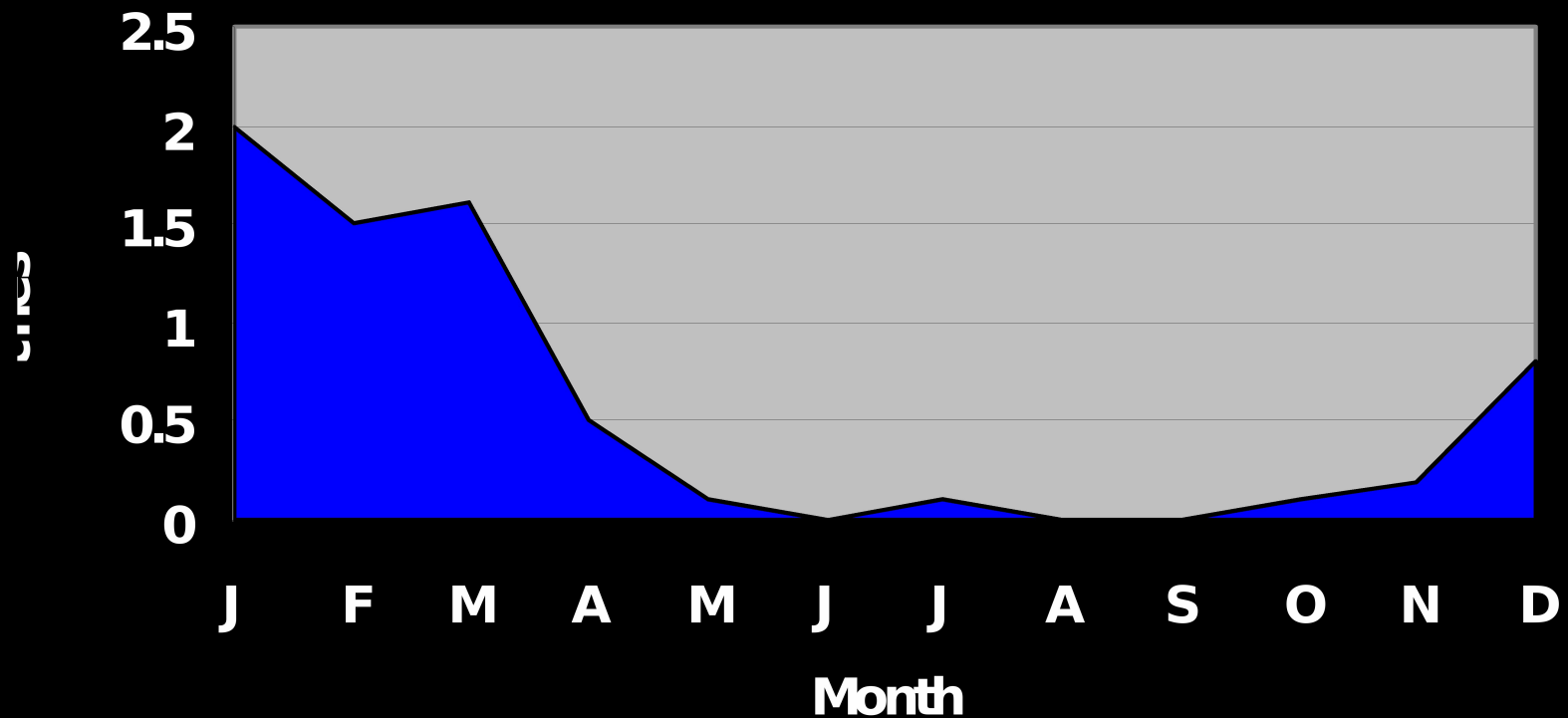
# Physical Environment

**Average Total Precipitation in Kabul**



# Physical Environment

Average Total Precipitation in Kandahar





# Environmental Health Risk

- Greatest short term risks associated with ingestion of contaminated food/water; extreme heat/cold; high altitude
- Greatest long term risks associated with air contamination and chemical contamination of food/water





# Environmental Issues

- Air Contamination
  - Overall, minimal health effects
  - High levels of particulate matter (PM10) able to reach the lungs recorded at Salerno, Kandahar, & Bagram
  - Short-term (less than or equal to 14 days duration) exposure presents a risk of temporary respiratory symptoms such as coughing, wheezing, and reduced lung function

# Environmental Issues Cont.

- Soil Contamination
  - Localized to specific areas around industrial facilities, waste disposal ditches, and open sewage ditches
  - Significant exposure is unlikely
- Water Contamination
  - Contaminated with raw sewage
  - One of the most significant health threats to deployed personnel
  - Sewage contamination of drinking water in urban areas is common

# Infectious Disease Risk

- **HIGH RISK** for infectious diseases
- Inadequate force health protection (FHP) measures, will seriously jeopardize mission effectiveness



# Infectious Diseases

- Foodborne and Waterborne Diseases
  - **HIGH RISK** = Diarrhea, hep A, typhoid fever
  - **INTERMEDIATE RISK** = brucellosis, cholera, hep E
- FHP Priorities
  - **Deploy appropriate PM personnel and equipment**
  - Consume food, water, ice only from US-approved sources
  - Operate food preparation facilities in accordance with Army doctrine
  - Ensure proper hand washing facilities near all latrines and dining facilities and enforce

# Infectious Diseases Cont.

- Vector-borne Diseases

- **HIGH RISK** = Malaria

- **INTERMEDIATE RISK** = Crimean-Congo hemorrhagic fever, leishmaniasis, sand fly fever, typhus, West Nile fever



- FHP Priorities

- Use DEET on all exposed skin

- Treat field uniforms with permethrin

- Use bed nets in field conditions, treat with permethrin

- **Enforce malaria chemoprophylaxis as appropriate**



# Infectious Diseases Cont.

- Animal-contact Diseases
  - **HIGH RISK** = Rabies, among the highest in the world
  - **INTERMEDIATE RISK** = Anthrax, Q-fever
- FHP Priorities
  - Avoid animal contact, especially if the animal exhibits strange behavior
  - No mascots
  - Report all animal bites and scratches





# Infectious Diseases Cont.

- Sexually Transmitted Diseases
  - **INTERMEDIATE RISK** = gonorrhea, chlamydia, HIV, Hep B
- FHP Priorities
  - Avoid sexual contact
  - Use latex condoms if sexually active



# Infectious Diseases Cont.

- Water-contact Diseases
  - **INTERMEDIATE RISK** = leptospirosis
- FHP Priorities
  - avoid unnecessary contact with lakes, rivers, streams, and other surface water

There will not be a sign like this.

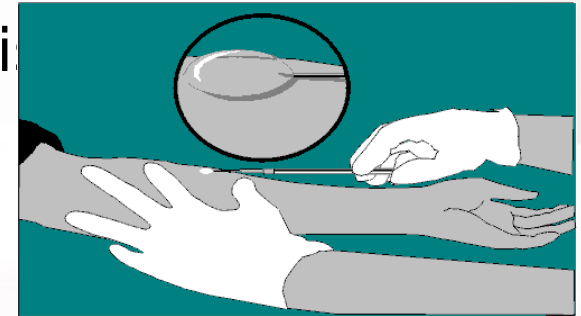
**LEPTOSPIROSIS**  
**HEALTH HAZARD**

FRESH WATER STREAMS AND MUD  
POSSIBLY POLLUTED WITH BACTERIA

SWIM, BOAT,  
OR HIKE AT YOUR OWN RISK

# Infectious Diseases Cont.

- Respiratory Diseases
  - **INTERMEDIATE RISK** = tuberculosis



- FHP Priorities

- Tuberculin skin test before and after deployment
- 72 sqft/person and head-to-toe sleeping arrangement
- Cough or sneeze into your upper sleeve instead of your hands
- Wash hands at every opportunity
- Avoid close contact with local population



# Hazardous Animals & Plants

- Animals

- Rabid dogs, snakes, centipedes, scorpions, spiders



- Plants

- Mexican Poppy, Fetid Nightshade



- FHP Priorities

- Do not handle animals
- Shake out boots, clothing, & bedding
- Do not touch, chew, eat, or burn unfamiliar plants



# SUMMARY

- Physical Environment
- Infectious Diseases = **High Risk**
- Hazardous Animals and Plants
- FHP measures are simple and effective
  - Use and Enforce
  - Will conserve the fighting stren

